

REMARKS/ARGUMENTS

Claim 17 was objected to under 37 CFR 1.75 as being a substantial duplicate of claim 16.

Claims 1-18 stand rejected under 35 U.S.C. 102(e) as being anticipated by Mayur.

The Mayur patent teaches in paragraph [007] that the implant anneal is improved if the maximum temperature during the anneal is greater than 1300K for a duration of less than 50 ms. Claim 1 of the instant invention comprises the limitation of annealing said implanted semiconductor with a ultra high temperature anneal comprising annealing temperatures from 1050°C to 1350°C. As the examiner is well aware, for a 35 U.S.C. 103(e) rejection to be valid, all the elements of the claimed invention have to be present in the cited reference. The claimed range of 1050°C to 1350°C is certainly not contained in the statement of an anneal with a maximum temperature greater than 1300K.

The examiner refers to paragraph [0099] of the Mayur references and states that paragraph describes surface melting only allowed. The examiner then concludes that this means temperatures around melting temperatures; table II 1423K (1150 C). In response, the applicant cannot find anywhere in paragraph [0099] the statement that surface melting only is allowed. What is actually stated in paragraph [0099] is, "[F]or energy densities high enough to cause surface melting, there will be a time during resolidification where the interface temperature will have a maximum deviation from the equilibrium melt temperature. The velocity of the melt-solid interface will be at a maximum at that time." There is nothing in paragraph [0099] that implies a surface melting only condition as incorrectly stated by the examiner. There is therefore nothing in paragraph [0099] that restricts the temperature.

Based on the above, claim 1 is allowable over the Mayur reference under 35 U.S.C. 102(e). Claims 2-4 depend on claim 1 and therefore contain all the limitations of claim 1. Claims 2-4 are therefore also allowable over the cited art.

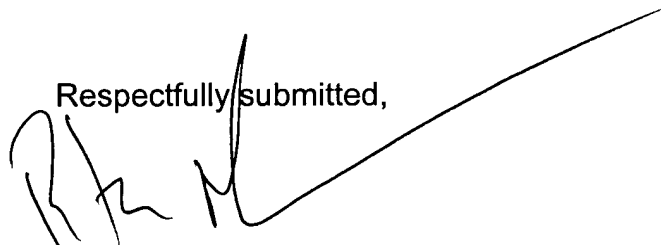
Examination of all the remaining independent and dependent claims contained in the instant application will show that claims 5-18 all comprise the limitation of annealing said implanted semiconductor with a ultra high temperature anneal comprising annealing temperatures from 1050°C to 1350°C. Therefore, based on the above, claims 5-18 are therefore also allowable over the cited art.

In light of the above, it is respectfully submitted that the present application is in condition for allowance, and notice to that effect is respectfully requested.

While it is believed that the instant response places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

To the extent necessary, Applicants petition for an Extension of Time under 37 CFR 1.136. Please charge any fees in connection with the filing of this paper, including extension of time fees, to the deposit account of Texas Instruments Incorporated, Account No. 20-0668.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Peter K. McLarty', is written over the signature line. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Peter K. McLarty
Attorney for Applicants
Reg. No. 44,923

Texas Instruments Incorporated
P.O. Box 655474, MS 3999
Dallas, TX 75265
(972) 917-4258

Amendments to the Drawings:

None